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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,506	02/05/2002	Masatoshi Imai	59227/SONYP	2876
24201	7590	11/12/2004		
FULWIDER PATTON LEE & UTECHT, LLP HOWARD HUGHES CENTER 6060 CENTER DRIVE TENTH FLOOR LOS ANGELES, CA 90045			EXAMINER NGUYEN, CAM LINH T	
			ART UNIT	PAPER NUMBER
			2161	

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,506

Applicant(s)

IMAI, MASATOSHI

Examiner

CamLinh Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 2, 4 – 6, 8 – 13, 15 - 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Lewis et al (U.S. 6,775,667).

♦ As per claim 1, 4, 11,

Lewis discloses a sort processing method for comparing magnitudes of pieces of input data with each other and rearranging said pieces of input data in accordance with results of comparison, said method comprising the step of:

- “Repeating basic processes, each of which is composed of a combination of a comparison processing and a selection processing, in a pipeline configuration, said comparison processing being used to compare magnitudes of pieces of input data with each other by using data comparators and said selection processing being used to select pieces of input data by using data selectors” See Fig. 4, col. 8, lines 1 – 26. Lewis teaches a method for sorting items by comparing respective value with each other (col. 3, lines 15 – 20). “In a pipeline configuration” (See col. 8, lines 25 – 26).
- “Wherein the total number of said basic processes is equal to the number of combinations of pieces of input data to be compared” See col. 2, lines 53 – 56. The

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examiner acknowledged that Lewis improved the system as disclosed in Fig. 1 – 2 by included a FIFO buffer to store more items. Other than that, the process is still the same (col. 9, lines 3 – 23).

◆ As per claim 2, 6, 13, Lewis discloses:

- “A sort processing method according to claim 1 wherein the size of sort processing is increased by raising the number of basic processes to keep up with an increase in the number of pieces of input data” col. 11, lines 42 – 51.

◆ As per claim 5, 8, 12, 15, Lewis discloses:

- “A sort processing apparatus according to claim 4 wherein said first data selector is provided with a pair of data selectors used for receiving a pair of pieces of input data; and said first data selector is controlled on the basis of said first select signal so as to allow output terminals of said data selectors to output said pair of pieces of input data in a predetermined magnitude order” col. 7, lines 2 – 8, col. 9, lines 3 – 23.

◆ As per claim 9, 16, Lewis discloses:

- “A sort processing apparatus according to claim 4 wherein, if the number of said pieces of input data is odd, an invalid piece of input data is added to said valid pieces of input data to make the total number of said pieces of input data even, and said invalid piece of input data is set at a value greater than a maximum among said valid pieces of input data or a value smaller than a minimum among said valid pieces of input data” Col. 11, lines 13 – 15.

◆ As per claim 10, 17, Lewis discloses:

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- "A sort processing apparatus according to claim 4 wherein said first basic cells are laid out over a rectangular area" See Fig. 2 – 3.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 7, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al (U.S. 6,775,667) in view of Yoshikatu Nakamura (U.S. 5,392,366).

♦ As per claim 3, 7, 14,

Lewis discloses all of the claimed subject matter as set forth above. Further claims 3, 7, 14 include a clock/latch signal is used for synchronizing said pieces of input data

Lewis does not clearly disclose this subject matter.

However, in the same field of endeavor, Nakamura discloses a sort processing system (Col. 2, lines 61 – 62) that uses a clock/latch for synchronization input data (col. 4, lines 5 – 12).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to apply the teaching of Nakamura into the system of Lewis because the combination would provide the user more control of data in a sort processing.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- Meck et al (U.S. 6,021,407) discloses a partitioning and sorting logical units of data prior to reaching an end of the data file.
- Yasumori Kasahara (U.S. 5,710,937) discloses a sorting apparatus.
- Fujiwara et al (U.S. 5,842,207) discloses a method for storing records of a distributed database by plural processors to provide a host processor with sorted records belonging to one of a plurality of key sections.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CamLinh Nguyen whose telephone number is 571 – 272 - 4024. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571 – 272 - 4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen, Cam-Linh

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